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ABSTRACT

Using the state-mandated Texas at-risk criteria to identify students at-risk for dropping out, the Austin (Texas) Independent School District (AISD) followed those students for three years to determine the accuracy of the mandated state criteria. The study focuses on the classification and follow-up of 25,587 students in 1987-88, 25,292 students in 1988-98, and 25,998 students in 1989-90 in grades 7 through 12. Enrollment status, age, grade, ethnicity, number of "F"s, achievements test scores, and dropout rates at several times are obtained from the computer files maintained by the AISD. Results identify 41% to 46% of the enrollment as at-risk, with high school, Black, or Hispanic American males being the most frequently found. The three-year follow-up on the 1987-88 group found that of the original at-risk students in grades 9 through 12, 33% had graduated, 33% were still enrolled, and less than 33% had dropped out. Of the students in grades 7 through 8, slightly more than 33% were still enrolled, more than 33% had transferred, and fewer than 33% had dropped out. The study shows that the state criteria over-identify at-risk students. In addition, other students are dropping out who have not been identified as at-risk. Eight figures and two attachments display the data. Four references are included. (JB)

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At-Risk Students Three Years Later: We Know Which Ones Will Drop Out

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Department of Management Information
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of the
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AT-RISK STUDENTS THREE YEARS LATER: WE KNOW WHICH ONES WILL DROP OUT

National attention has been drawn to the increasing problem of dropouts and of students at risk of dropping out. Numerous community and school programs have been designed and implemented to stem the flow of these students exiting the school prior to graduation. Despite the best efforts of all involved in the numerous programs that have been implemented, students continue to drop out.

There is a need for information on whether we are correctly identifying the students who are at risk of dropping out. Clearly, we want to know whether the students who are most at risk are being served by our dropout prevention programs. Our schools need to know who is at risk and why in order to meet their needs.

The Austin Independent School District's (AISD) Office of Research and Evaluation (ORE) has been researching the dropout issue for several years and has studied the implementation of the mandated Texas at-risk criteria to identify at-risk students. Having identified the students, we have followed them for three years to determine how accurate that initial identification was.

OBJECTIVE

The objective of this paper is to contribute to national research by providing information on one aspect of the dropout problem from an urban Texas school district perspective. There are four parts to the main objective:

- Describe the Texas mandated at-risk criteria and the local district operationalization of those criteria.
- Discuss a three-year follow-up of the 1987-88 at-risk students.
- Share findings about the use of at-risk criteria so that other local systems can better focus their at-risk identification procedures.
- Discuss possible ways that such criteria could become more effective.

PERSPECTIVE

Like every other school district in the country, our urban, Texas district is concerned with the large percentage of our students who drop out of school. In the past year, 1989-90, 1,748 students (10.0%) in grades 9-12 dropped out. In the most recent ninth-grade cohort for which data are available (first-time ninth grades of 1986-87), 25.4% of the students dropped out before graduation.

By use of centrally maintained data files, ORE has for several years provided information to the schools for their use in assessing the at-risk status of their students. For the last four years ORE has identified for the schools the at-risk students using the State criteria. This study focuses on the results of three years' experiences of using the State criteria to identify students at risk and those students who dropped out at the end of each school year.

The State-mandated criteria overidentify at-risk students. There are more students identified as at risk than the schools can effectively concentrate on. There are also students slipping through the cracks--dropping out--who were not identified as being at risk. There is a need to refine the criteria so that school staff can better focus energies on students who are going to drop out. There is also a need to identify students in a more timely fashion--before the ninth grade.

TEXAS AT-RISK CRITERIA

In 1986 the Texas Legislature approved House Bill 1010, one provision of which was a specification of criteria by which Texas schools would identify students at risk of dropping out and notify their parents. As a consequence of this educational reform legislation Texas school districts had to operationalize and implement the mandate.

For purposes of identifying and tracking at-risk students, the local school district operationalized the State criteria as follows:

State Criterion	Local Operational Definition
Not advanced from one grade level to the next for two or more school years	Two or more years older than expected for the grade level
Has mathematics or reading skills that are two or more years below grade level	Two or more years below grade level as measured by a norm-referenced achievement test
Has failed two or more courses in one or more semesters and is not expected to graduate within four years of the time the student entered the ninth grade	Has two or more F's in a semester
Has failed one or more of the reading, writing, or mathematics sections of the most recent TEAMS test beginning with the seventh grade	Has failed one or more of the Texas Educational of Assessment of Minimum Skills (TEAMS) Mathematics, Reading, or Writing tests, most recent score

To better pinpoint differential dropout rates, the District's Office of Research and Evaluation (ORE) extended the State at-risk criteria, resulting in 22 individual at-risk categories. See Figure 1 (H.B. 1010: The State At-Risk Criteria) for a full description of the Texas at-risk criteria and Figure 2 for a listing of the 22 categories.

METHODS

This study focused on the classification and follow-up of 25,587 students enrolled in 1987-88, 25,292 students enrolled in 1988-89, and 25,998 students enrolled in 1989-90 who were in grades 7-12. Enrollment status, age, grade, ethnicity, number of F's, achievement test scores, and dropout rates at several points in time were obtained from the extensive computer files maintained by the District.

RESULTS

There is not sufficient room to delineate all the findings. The following section describes the at-risk students for four years and highlights some of the results from the analyses of the end of year 1 for three different years. Results from the end of the first year as well as the second and third-year follow-up will be discussed in this paper.

How many students are at-risk?

For grades 7-12, the number of students considered at risk by the State criteria was 11,330 (44.3%) in 1987-88, 11,668 (46.1%) in 1988-89, 10,759 (41.4%) in 1989-90, and 11,040 (443.4%) in 1990-91. These numbers represent almost half of the secondary students for each of the last four years.

Who are the students at risk?

For the last four years, a determination has been made of the at-risk status (as of October 30) of each student in grades 7-12. The most important findings are;

- The number of students considered at risk is 41-46% of the enrollment.
- High school students (56%) are more likely to be at risk than junior high school students (28-33%).
- A greater proportion of the Hispanic (54-60%) and Black (59-61%) enrollment is identified as at risk than American Indian (33-47%), Asian (34-40%), or White (25-31%).
- More males (46-51%) are at risk than females (37-41%).

FIGURE 1

H.B. 1010: THE STATE AT-RISK CRITERIA

H.B. 1010, passed by the Texas State Legislature in 1986 and taking effect September 1, 1987, relates to reducing the number of students who drop out of public school. Section 4 (f) of this bill states:

For the purposes of this section, "student at risk of dropping out of school" includes each student in grade levels seven through 12 who is under 21 years of age and who:

(1) was not advanced from one grade level to the next two or more school years;

(2) has mathematics or reading skills that are two or more years below grade level;

(3) did not maintain an average equivalent to 70 on a scale of 100 in two or more courses during a semester, or is not maintaining such an average in two or more courses in the current semester, and is not expected to graduate within four years of the date the student begins the ninth grade; or

(4) did not perform satisfactorily on an assessment instrument administered under Section 21.551(a) of this code in the seventh, ninth, or twelfth grade.

Grades 7-12
19 TAC 75.195(c) (1) - (4)

Below 21 years of age and meet one or more of the following:

(1) has not been promoted one or more times in grades 1-6 based on academic criteria established in subsections (a) and (b) of this section and continues to be unable to master the essential elements in the 7th or higher grade level;

(2) is two or more years below grade level in reading or mathematics;

(3) has failed at least two courses in one or more semesters and is not expected to graduate within four years of the time the student entered the 9th grade; or

(4) has failed one or more of the reading, writing, or mathematics sections of the most recent TEAMS test beginning with the seventh grade.

Grades 7-12
TEC 21.557 (f)

Under 21 years of age and who:

(1) was not advanced from one grade level to the next two or more school years;

(2) has mathematics or reading skills that are two or more years below grade level;

(3) did not maintain an average equivalent to 70 on a scale of 100 in two or more courses in the current semester, and is not expected to graduate within four years of the date the student begins the ninth grade; or

(4) did not perform satisfactorily on an assessment instrument administered under Section 21.551(a) of this code in the seventh, ninth, or twelfth grade.

H.B. 1010 amended the Texas Education Code (TEC) guidelines which are contained in the Texas Administrative Code (TAC). Provisions in both the TEC and TAC must be implemented as law.

A student who meets one or more of these criteria shall be identified as at risk. A student does not have to meet all four criteria to be considered at risk.

Optional criteria for identifying at-risk students, grades 1-12, are also included as follows:

Grades 1-12
19 TAC 75.195 (c) (5)
Optional criteria:

* environmental factors,
* familial factors,
* economic factors,
* social factors,
* developmental factors,
* other psychosocial factors where such factor contributes to the students' inability to progress academically.

Grades 7-12
TEC 11.205 (c)
Optional criteria:

* adjudged delinquent;
* abuses drugs/alcohol;
* limited English proficiency
* receives compensatory or remedial instruction;
* sexually, physically, or psychologically abused;
* pregnant;
* slow learner;
* underachiever;
* enrolls late in school year;
* stops attending school before the end of the school year;
* unmotivated; or
* other characteristics that indicate the student is at high risk of dropping out.

FIGURE 2

Definitions of Risk Category Codes

Risk Category	Risk Factors	Definition
1	Age	Student is two or more years older than expected for the grade level
2	Read Ach	Student scored two or more years below grade level in reading on a norm-referenced, standardized achievement test (either the Iowa Tests of Basic Skills or the Tests of Achievement and Proficiency)
3	Math Ach	Student scored two or more years below grade level in mathematics on a norm-referenced, standardized achievement test (either the ITBS or the TAP)
4	2 F's	Student failed at least two courses during a semester
5	TEAMS Read	Student failed the reading section on the most recent administration of the state-mandated, criterion-referenced Texas Educational Assessment of Minimum Skills (TEAMS) (grades 7 and 9 only)
6	TEAMS Math	Student failed the mathematics section of the TEAMS
7	TEAMS Lang	Student failed the language arts section of the Exit-Level TEAMS (grades 11 and 12 only)
8	TEAMS WRITE	Student failed the writing section of the TEAMS (Grades 7 and 9 only)
9	TEAMS W COMP	Student failed only the writing composition portion of the TEAMS Writinig test (grades 7 and 9 only)
10	Age, Read Ach or Math Ach	Student is two or more years older than expected for the grade level and scored two or more years below grade level in reading or mathematics on the ITBS or TAP
11	Age, 2 F's	Student is two or more years older than expected for the grade level and failed at least two courses during a semester
12	Age, TEAMS (any)	Student is two or more years older than expected for the grade level and failed at least one of the sections of the TEAMS
13	Math Ach or Read Ach & 2 F's	Student scored two or more years below grade level in mathematics or reading on the ITBS or the TAP and failed at least two courses during a semester
14	Math Ach or Read Ach & TEAMS (any)	Student scored two or more years below grade level in mathematics or reading on the ITBS or the TAP and failed at least one of the sections of the TEAMS
15	2 F's, TEAMS (any)	Student failed at least two courses during a semester and failed at least one of the sections of the TEAMS
16	Age, Math Ach or Read Ach, & 2 F's	Student is two or more years older than expected for the grade level, scored two or more years below grade level in mathematics or reading on the ITBS or the TAP, and and failed at least two courses during a semester
17	Age, Math Ach or Read Ach, &TEAMS (any)	Student is two or more years older than expected for the grade level, socred two or more years below grade level in mathematics or reading on the ITBS or the TAP, and failed at least one of the sections of the TEAMS
18	Age, 2 F's, & TEAMS (any)	Student is two or more years older than expected for the grade level, failed at least one of the sections of the TEAMS
19	Age, Math Ach or Read Ach, 2 F's, & TEAMS (any)	Student is two or more years older than expected for the grade level, scored two or more years below grade level in mathematics or reading on the ITBS or the TAP, failed at least two courses during a semester, and failed at least one of the sections of the TEAMS
20	Math Ach & Reading Ach	Student scored two or more years below grade level in mathematics and in reading on the ITBS or the TAP
21	TEAMS (two)	Student failed at least two sections of the TEAMS.
22	Math Ach or Read Ach, 2 F's, &TEAMS (any)	Student scored two or more years below grade level in mathematics or reading on the ITBS or the TAP, failed at least two courses during a semester, and failed at least one of the sections of the TEAMS.

End of Year One for Three Years

What is the relationship between being at-risk and dropping out?

For grades 7-12, a total of 2,374 (9.3%) students dropped out by the end of the sixth six weeks of 1987-88. Only 1,371 (57.7%) of the dropouts came from those considered at risk; 752 (31.7%) of the dropouts were not identified as at risk by the State criteria; 251 of the dropouts were not enrolled prior to October 30, 1987 and were not evaluated for at-risk status. New students who come to us as without test scores or grades and who are not overage can not be identified as at risk by the State criteria.

In 1987-88 the dropouts represented 12.1% of the at-risk students. The majority (87.9%) of at-risk students did not drop out. Dropouts represented 5.3% of students not at risk. The majority (94.7%) of not-at-risk students did not drop out. See Figure 3 Number and Percent of Dropouts, Grades 7-12. (pie graphs)

Which risk categories are students in?

The number of students in each risk category, the number of dropouts from each category, and the percentage of dropouts from each category are displayed in Attachment 1 Dropouts As a Function of At-Risk Status. For 1987-88 and 1988-89, the percentages of dropouts for each category vary from as little as .09 (category 1) to as much as 6.94 (category 7). For the most part the percentages differ very little. The categories are very consistent.

When we scan across all three years we can see that the categories are still fairly consistent. The top categories remain the highest and vary by as little as 3.28 from the lowest to the highest (category 12). Other than the shift in numbers in the categories as a result of refining the F criterion (to be discussed below), the categories have remained stable for three years.

Are there high-risk categories?

The at-risk categories most associated with dropping out in 1987-88 are:

1) Age and TEAMS
2) Age
3) Age, TEAMS, and achievement
4) Age and achievement
5) Age and F's

Age is common to all five categories. In 1987-88 these five categories represented 20% of at-risk students but 61.3% of the at-risk students who dropped out. In 1988-89 a category was added and the top five categories became the top six categories. See Attachment 2 Students at High Risk For Dropping Out.

In 1987-88 fewer of those students with F's dropped out than might be expected. Eight categories including F's were represented by 17.9% of students at risk, but only 10.5% of the dropouts came from these categories. Of those with F's only, only 3.5% dropped out.

In 1989-90 the local operational definition for the "F" category was modified to include not on pace towards graduation in addition to two or more F's in a semester. The total number of at-risk students declined as those students with two or more F's who were on pace towards graduation were no longer considered at risk. The eight categories including F's were now represented by 22.5% (2,416) of students at risk, and 21.6% (523) of the dropouts came from these categories. Of those at risk because of F's only, the dropout rate rose to 11.79%.

Refining the criteria for the "F" category improved its ability to predict dropouts. The number of students in the number 4 category "2 F's" dropped dramatically from 1,182 in 1988-89 to 560 in 1989-90. As a corollary those students who had F's but were on pace towards graduation who were also at risk for other factors moved from the categories containing F's to the categories containing those other factors minus the F's.

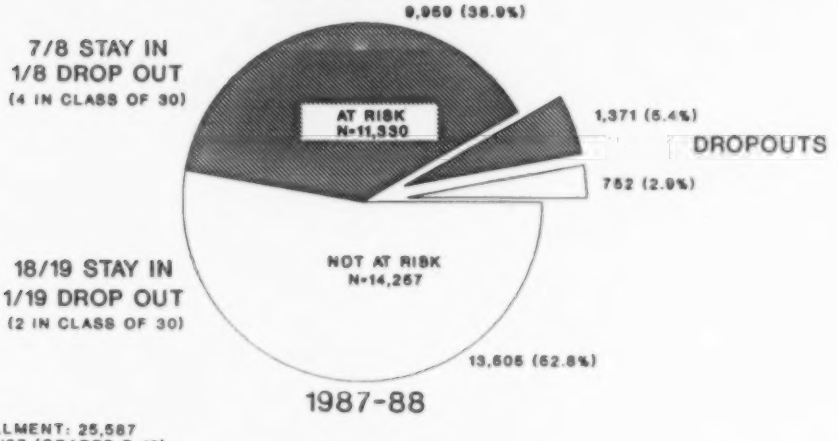
Three Year Follow up For At-Risk Students of 1987-88

What had happened two and three years later to the first group of students identified as at risk of dropping out of school using the Texas at-risk criteria?

Of the at-risk students who had been in grades 9-12, about one third had graduated, one third were still enrolled, and slightly less than one third had dropped out. Of the at-risk students who had been in grades 7-8, two thirds were still enrolled and one fourth had dropped out.

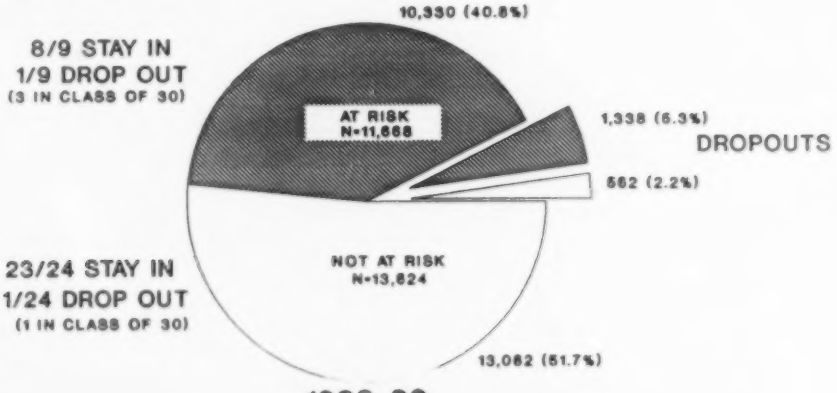
In comparison, for the not-at-risk students in grades 9-12, more had graduated or transferred; fewer had dropped out or were still enrolled. For the not-at-risk students in grades 7-8, slightly more were still enrolled, more had transferred and fewer had dropped out. Some of the students who were not at risk in 1987-88 became at risk in 1988-89 and 1989-90. For grades 7-8, 1,057 (20.5%) became at-risk. For grades 9-12, 1,537 (16.8%) became at risk. The majority of the not-at-risk students became at-risk because of F's and overage, thus falling off-pace towards graduation.

FIGURE 3
NUMBER AND PERCENT OF DROPOUTS
GRADES 7-12



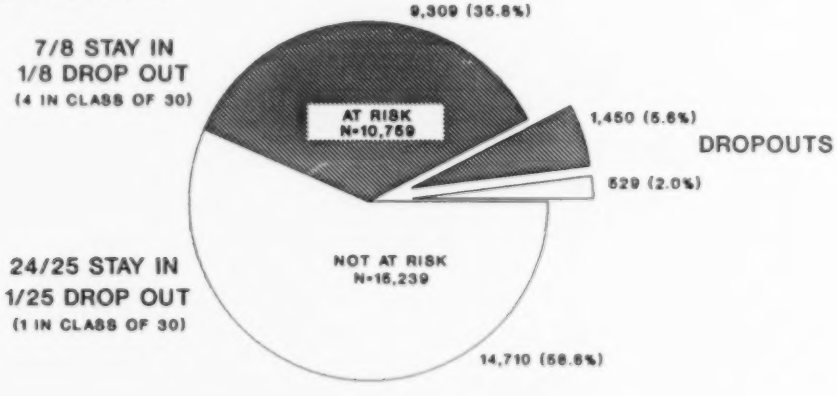
1987-88

AISD ENROLLMENT: 25,587
As of 10/30/87 (GRADES 7-12)



1988-89

AISD ENROLLMENT: 25,292
As of 10/30/88 (GRADES 7-12)



AT-RISK VS. NOT-AT-RISK STUDENTS
1989-90

AISD ENROLLMENT: 25,998
As of 10/30/89 (GRADES 7-12)

FIGURE 4
SUMMARY OF ENROLLMENT
AT-RISK STUDENTS AND DROPOUTS

	1987-88	1988-89	1989-90	1990-91
Enrollment*	25,587	25,292	25,998	25,438
At-risk	11,330 (44.3%)	11,668 (46.1%)	10,759 (41.4%)	11,041 (43.4%)
Not-at-risk	14,257 (55.7%)	13,624 (53.9%)	15,239 (58.6%)	14,397 (56.6%)
Dropouts	2,374	2,172	2,209	N/A
At-risk	1,371 (57.8%)	1,338 (61.6%)	1,450 (65.7%)	
Not-at-risk	752 (31.7%)	562 (25.9%)	529 (23.9%)	
New	251 (10.5%)	272 (12.5%)	230. (10.4%)	
At-Risk Students				
Dropouts	13,271 (12.1%)	1,338 (11.5%)	1,450 (13.5%)	
Stay-ins	9,959 (87.9%)	10,330 (88.5%)	9,309 (86.5%)	
Not-At-Risk Students				
Dropouts	752 (5.3%)	562 (4.1%)	529 (3.5%)	
Stay-ins	13,505 (94.7%)	13,062 (95.9%)	14,710 (96.5%)	

*Enrollment is as of October 30 of each year.

THREE YEAR FOLLOW-UP STUDY
STATUS AT END OF THREE YEARS

GRADES 7-8 1987-88	At-Risk N	At-Risk %	Not At-Risk N	Not At-Risk %
Graduated	N/A	--	1	0.0
Still Enrolled	2,432	66.00	3,798	72.4
Died	--	--	2	0.0
Transferred	359	9.74	915	17.4
Dropped Out	894	24.26	530	0.0
TOTAL	3,685	100.00	5,246	100.00

GRADES 9-12 1987-88	At-Risk N	At-Risk %	Not At-Risk N	Not At-Risk %
Graduated	2,323	30.48	5,066	56.1
Still Enrolled	2,570	33.72	1,945	21.5
Died	7	.09	4	0.0
Transferred	649	8.52	978	10.8
Dropped Out	2,072	27.19	1,043	11.6
TOTAL	7,621	100.00	9,036	100.0

How many had dropped out from the original at-risk categories? How predictive were the at-risk categories? Were there any surprises?

Overall, the at-risk categories most associated with dropping out at the end of the sixth six weeks in 1987-88 continued to be the categories with the highest percentage of dropouts two and three years later. See Figure 5 for 22 Categories of At-Risk Students and Their Dropout Rates, 1987-88 and Figure 6 Three Year Follow-Up Study, Dropouts as of October Each Year, Grades 7-12.

GRADES 9-12

For grades 9-12 categories 12, 10, 1, 16, 11, and 19 were the source of the highest percentage of dropouts at the end of three years. Categories 12, 10, 1, and 11 had been four of the five top categories at the end of the first year. The categories 16 and 19 were not top categories at the end of the first year.

For categories 1, 10, 12, and 17 the majority (67-87%) of the dropouts from the students at risk in those categories in year one dropped out the first school year. These categories all included overage students and did not include F's. Evidence would indicate that overage students

FIGURE 5
DROPOUT RATES BY CATEGORY
GRADES 7-12, 1987-88

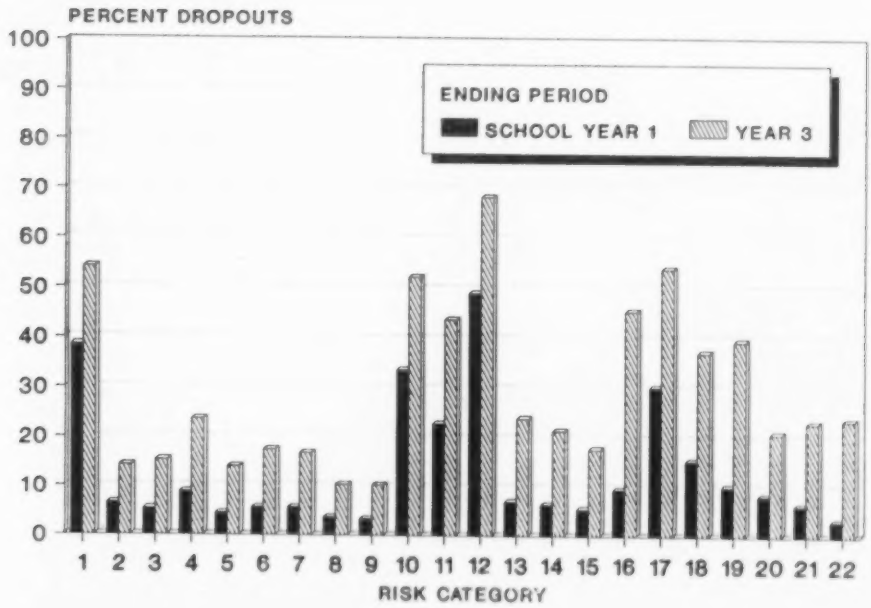


FIGURE 6
THREE YEAR FOLLOW-UP STUDY
DROPOUTS AS OF OCTOBER EACH YEAR
GRADES 7-12

CATEGORY	TOTAL 1987-88	6 6 WEEKS N	%	DROP YEAR 1 N	%	DROP YEAR 2 N	%	DROP YEAR 3 N	%
1	1,106	426	38.5	505	45.7	578	52.3	600	54.2
2	662	43	6.5	59	8.9	78	11.8	94	14.2
3	321	17	5.3	33	10.3	45	14.0	49	15.3
4	725	64	8.8	84	11.6	152	21.0	171	23.6
5	229	10	4.4	10	4.4	26	11.3	32	14.0
6	373	21	5.6	29	7.8	46	12.3	65	17.4
7	18	1	5.6	3	16.7	3	16.7	3	16.7
8	631	23	3.6	34	5.4	55	8.7	65	10.3
9	1,242	41	3.3	57	4.6	99	8.0	127	10.2
10	215	72	33.5	86	40.0	108	50.2	112	52.1
11	163	37	22.7	41	25.1	64	39.3	71	43.6
12	374	183	48.9	209	55.9	237	63.4	255	68.2
13	189	13	6.9	14	7.4	43	22.7	45	23.8
14	2,053	130	6.3	165	8.0	303	14.8	437	21.3
15	353	19	5.4	19	5.4	55	15.6	62	17.6
16	64	6	9.4	8	12.5	22	34.4	29	45.3
17	409	123	30.1	146	35.7	195	47.7	220	53.8
18	92	14	15.2	18	19.6	35	38.0	34	37.0
19	140	14	10.0	16	11.4	46	32.9	55	39.3
20	418	34	8.1	48	11.5	71	17.0	87	20.8
21	1,070	66	6.2	93	8.7	169	15.8	245	22.9
22	459	14	3.0	19	4.1	90	19.6	108	23.5
TOTALS	11,306	1370	12.1	1696	15.0	2,520	22.3	2,966	26.2

not at risk because of making F's, with or without any additional risk factors, are at high risk of dropping out and dropping out the very year that they are identified.

For categories 16, 18, and 19 few (9-15%) of the dropouts dropped out the first year. Many additional students (48-55%) dropped out the second year. These categories included overage and F's. Evidence would indicate that overage students at risk also for F's may not drop out at high rates the first year they are identified but drop out at high rates the second year, and as seen below continue dropping out at high rates the third year.

There are only two categories with increases of more than five percentage points--categories 16 and 19--for the third year. The other categories increased slightly--less than five percentage points--in year three.
See Figure 7 Three Year Follow-Up Study, Dropouts as of October Each Year Grades 9-12.

GRADES 7-8

For grades 7-8 categories 12, 1, 17, 10, and 20 were the source of the highest percentage of dropouts at the end of three years. Categories 12, 1, 17 and 10 had been the top four categories at the end of the first year.

For grades 7 and 8 the number of dropouts doubled and tripled during the second and third year in some categories. These increases may have reflected the promotion of eighth graders to grade nine. Grade nine is known to be a hazardous grade with the highest percentage of at-risk students and dropouts.

Some categories such as category 12 had a high percentage of dropouts at the end of the first year and added steadily to the percentage of dropouts each year thereafter. See Figure 8 Three Year Follow-Up Study, Dropouts as of October Each Year Grades 7-8.

What categories were the students in when they dropped out?

Students who dropped out the first year dropped out from the category they were identified with for 1987-88. Students who dropped out in later years did not necessarily drop from the category they were identified with in 1987-88. Many students moved to other categories as they moved from level to level in school and many of the dropouts tended to come from the high risk categories.

CATEGORY CHANGE AND RISK CHANGE

Did students become more or less at risk as they moved from one level to the next?

The average dropout probability for all at-risk students grades 7-12 in 1987-88 was 12.10. For those students who did not return for 1988-89 the average risk rate was 16.78. For those students who did return for 1988-89 their risk rate in 1987-88 was 9.49 and the risk rate for 1988-89 was 12.33.

Risk Rates

	1987-77	1988-89	1989-90
All students	12.10		
Did not return	16.78		
Returned in 88-89	9.49	12.33	
Returned in 89-90	8.96	11.46	13.02

The average risk rate for students who returned in 1988-89 increased 2.84 points. For students who also returned in 1989-90 the average risk rate increased 2.50 points from year one to year two and increased 1.56 points from year two to year three.

The evidence suggests that the lower the risk in year one, the more likely the student is to be in school two and three years later. The higher the risk is in year one the more likely he is not to return for the following year. The evidence also suggests that students who are identified as at risk become more at risk as they move from level to level.

USE OF AT-RISK CRITERIA

In AISD the at-risk criteria have been used to identify students for placement in dropout prevention programs and enrollment in courses designed for at-risk students. ORE has used the at-risk criteria in research to predict dropping out and in evaluating the effectiveness of dropout prevention programs.

The State-mandated criteria overidentify at-risk students. There are more students identified as at risk than the schools can effectively concentrate on. The criteria have been refined and used to identify those students at high risk of dropping out so that efforts may be targeted to them.

FIGURE 7
THREE YEAR FOLLOW-UP STUDY
DROPOUTS AS OF OCTOBER EACH YEAR
GRADES 9-12

CATEGORY	TOTAL 1987-88	6 6 WEEKS N	%	DROP YEAR 1 N	%	DROP YEAR 2 N	%	DROP YEAR 3 N	%
1	820	348	42.4	409	49.9	445	54.3	440	53.6
2	505	33	6.5	44	8.7	57	11.3	57	11.3
3	267	16	6.0	29	10.7	39	14.6	41	15.3
4	725	64	8.8	84	11.6	152	21.0	171	23.6
5	121	5	4.1	5	4.1	15	12.4	19	15.7
6	142	15	10.6	19	13.4	27	19.0	26	18.3
7	18	1	5.6	3	16.7	3	16.7	3	16.7
8	294	13	4.4	18	6.1	33	11.2	35	11.9
9	697	29	4.2	36	5.2	54	7.7	71	10.2
10	161	60	37.3	71	44.1	84	52.2	89	55.3
11	163	37	22.7	41	25.1	64	39.3	71	43.6
12	216	142	65.7	152	70.4	162	75.0	163	75.5
13	189	13	6.9	14	7.4	43	22.7	45	23.8
14	1,193	101	8.5	125	10.5	200	16.8	247	20.7
15	353	19	5.4	19	5.4	55	15.6	62	17.6
16	64	6	9.4	8	12.5	22	34.4	29	45.3
17	238	88	37.0	108	45.4	128	53.8	131	55.0
18	92	14	15.2	18	19.6	35	38.0	34	37.0
19	140	14	10.0	16	11.4	46	32.9	55	39.3
20	348	33	9.5	42	12.1	55	15.8	60	17.2
21	416	43	10.3	51	12.2	86	20.7	115	27.6
22	459	14	3.1	19	4.1	90	19.6	108	23.5
TOTALS	7,621	1,108	14.5	1,331	17.5	1,895	24.9	2,072	27.2

FIGURE 8
THREE YEAR FOLLOW-UP STUDY
DROPOUTS AS OF OCTOBER EACH YEAR
GRADES 7-8

CATEGORY	TOTAL 1987-88	6 6 WEEKS N	%	DROP YEAR 1 N	%	DROP YEAR 2 N	%	DROP YEAR 3 N	%
1	286	78	27.3	96	33.6	133	46.5	160	55.9
2	157	10	6.4	15	9.5	21	13.4	37	23.6
3	54	1	1.9	4	7.4	6	11.1	8	14.8
4	N/A	---	---	---	---	---	---	---	---
5	108	5	4.6	5	4.6	11	10.2	13	12.0
6	231	6	2.6	10	4.3	19	8.2	39	16.9
7	N/A	---	---	---	---	---	---	---	---
8	337	10	3.0	16	4.7	22	6.5	30	8.9
9	545	12	2.2	21	3.8	45	8.3	56	10.3
10	54	12	22.2	15	27.8	24	44.4	23	42.6
11	N/A	---	---	---	---	---	---	---	---
12	158	41	25.9	57	36.1	75	47.5	92	58.2
13	N/A	---	---	---	---	---	---	---	---
14	860	29	3.4	40	4.6	103	12.0	190	22.1
15	N/A	---	---	---	---	---	---	---	---
16	N/A	---	---	---	---	---	---	---	---
17	171	35	20.5	38	22.2	67	39.2	89	52.0
18	N/A	---	---	---	---	---	---	---	---
19	N/A	---	---	---	---	---	---	---	---
20	70	1	1.4	6	8.6	16	22.9	27	38.6
21	654	23	3.5	42	6.4	83	12.7	130	19.9
TOTALS	3,685	263	7.1	367	10.0	625	17.0	894	24.3

The at-risk criteria have also been used in a study to determine whether all at-risk students are being served by either dropout prevention programs or courses designed for at-risk students. We have looked at the match of students to programs to determine whether all groups of at-risk students are being served or are being partially served.

MAKING THE CRITERIA MORE EFFECTIVE

How can the criteria or at-risk categories be made more effective in predicting dropouts?

The criteria do not currently include Grade Point Average (GPA), percent of attendance, number of discipline incidents, any measure of newness to the district, nor weight for previously dropping out of school. These factors are all known to have some predictive value in predicting dropouts and are available to most school districts. Adding some of these criteria may increase our predictability of dropouts. However, because of multicollinearity, adding the above criteria may not increase our predictability.

Additional factors which are alleged to contribute to dropping out--such as pregnancy, single parent, parent was a dropout--are not available to most districts. It is not possible for us at this time to assess their usefulness.

EDUCATIONAL IMPORTANCE OF THE STUDY

School districts nationwide face the problem of dropouts and how to decrease the dropout rate. Our nation's well-being may well depend on how well we solve the problem. This study provides information on the variables used in identifying at-risk students and follow-up of differential dropout rates. More importantly, it offers new data on a three year follow-up of implementation of state-mandated at-risk criteria.

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DROPOUTS AS A FUNCTION OF AT-RISK STATUS
SCHOOL YEAR DROPOUTS, 1987-88, AND 1989-90
GRADES 7-12, END OF YEAR

Risk Category	At-Risk Students			Dropouts*			Dropouts as % of Risk Category		
	1987-88	1988-89	1989-90	1987-88	1988-89	1989-90	1987-88	1988-89	1989-90
1	1,113	941	1,021	426	361	310	38.27	38.36	30.36
2	662	555	770	43	45	28	6.50	8.11	3.64
3	321	214	327	17	15	12	5.29	7.01	3.67
4	726	1,182	560	64	41	66	8.82	3.47	11.79
5	229	301	244	10	16	13	4.37	5.32	5.33
6	374	336	257	21	31	17	5.61	9.23	6.61
7	18	16	4	1	2	0	5.56	12.50	0.00
8	632	523	500	23	21	17	3.64	4.02	3.40
9	1,246	1,258	903	41	48	24	3.30	3.82	2.66
10	215	180	218	72	60	53	33.48	33.33	24.31
11	163	296	387	37	48	127	22.70	16.22	32.82
12	377	369	365	183	167	167	48.54	45.26	45.75
13	189	366	232	13	11	35	6.88	3.01	15.09
14	2,054	2033	2,137	130	156	103	6.33	7.67	4.82
15	354	442	276	19	18	43	5.37	4.07	15.58
16	64	84	137	6	4	33	9.98	4.76	24.09
17	410	355	335	123	125	98	30.00	35.21	29.25
18	92	164	252	14	34	95	15.22	20.73	37.70
19	140	212	346	14	23	77	10.00	10.85	22.25
20	418	234	446	34	20	30	8.13	8.55	6.73
21	1,074	986	679	66	79	55	6.15	8.01	8.10
22	459	363	363	14	13	47	3.05	2.09	12.95
Total	11,330	11,668	10,759	1,371	1,338	1,450	12.10	11.47	13.48

* Total 1987-88 dropouts = 2,374; therefore, 1,003 (42.2%) not identified as at risk.
Total 1988-89 dropouts = 2,172; therefore, 834 (38.4%) not identified as at risk.
Total 1989-90 dropouts = 2,209; therefore, 759 (34.4%) not identifiied as at risk.

ATTACHMENT 1

ATTACHMENT 2
STUDENTS AT HIGH RISK FOR DROPPING OUT

The categories are as follows:		Percent of at risk students in these categories who dropped out in 1987-88	in 1988-89	in 1989-90
Age	Students is two or more years older than expected for the grade level.	38.27%	38.36%	30.36
Age, Read Ach or Math Ach	Student is two or more years older than expected for the grade level and scored two or more years below grade level in reading or mathematics on the ITBS or TAP.	38.48%	33.33%	24.31
Age, 2 F's	Student is two or more years older than expected for the grade level and failed at least two courses during a semester	22.70%	16.22%	32.82
Age, TEAMS (any)	Student is two or more years older than expected for the grade level and failed at least one of the sections of the TEAMS	48.54%	45.26%	45.75
Age, Math Ach or Read Ach and TEAMS (any)	Student is two or more years older than expected for the grade level, scored two or more years below grade level in mathematics or reading on the ITBS or the TAP, and failed at least one of the sections of the TEAMS.	30.00%	35.21%	29.25
Age, 2 F's, TEAMS (any)	Student is two or more years older than expected for the grade level, failed at least two courses during a semester, and failed at least one of the sections of the TEAMS.	15.22%	20.73%	37.70